



2017 Water Quality Report

Christian Springs Water System, PWSID# PA3480030

*Este informe contiene información muy importante sobre su agua de beber.
Tradúzcalo o hable con alguien que lo entienda bien.*

About Your Drinking Water

Aqua Pennsylvania, Inc. (Aqua) is pleased to provide you with important information about your drinking water in this 2017 Consumer Confidence Report for the Christian Springs Water System (public water supply ID-PA3480030). The report summarizes the quality of water Aqua provided in 2017 - including details about water sources, what the water at your tap contains, and how it compares to standards set by regulatory agencies. Although the report lists only those regulated substances that were detected in your water, we test for more than what is reported. This report is only a summary of our testing during 2017. If you have any questions about the information in this report, please call 570.443.7099 or visit our website at AquaAmerica.com.

Sources of Supply

Water for the Christian Springs Water System comes from two wells. The Pennsylvania Department of Environmental Protection (DEP) has completed source water assessments for the groundwater sources for this system. Information on source water assessments is available on the DEP Web site at www.depweb.state.pa.us (DEP keyword "source water"). Completed reports will be distributed to municipalities, water suppliers, local planning agencies, and DEP offices.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, are byproducts of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 800.426.4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 800.426.4791.

Our water systems are designed and operated to deliver water to our customers' plumbing systems that complies with state and federal drinking water standards. This water is disinfected using chlorine, but it is not necessarily sterile. Customers' plumbing, including treatment devices, might remove, introduce or increase contaminants in tap water. All customers, and in particular operators of facilities like hotels and institutions serving susceptible populations (like hospitals and nursing homes), should properly operate and maintain the plumbing systems in these facilities. You can obtain additional information from the EPA's Safe Drinking Water Hotline at 800.426.4791.

The following table lists contaminants that were detected in your water system. The table provides average, minimum and maximum levels of regulated contaminants found in samples from this system.

Aqua Pennsylvania, Inc., Christian Springs – PWSID# PA3480030

Contaminants	Average Detection	Range of Detections	MCL	MCLG	Sample Date	Violation Y/N	Major Sources in Drinking Water
Chlorine, ppm	1.5	0.8 – 2.8	MRDL = 4	MRDLG = 4	2017	N	Water additive used to control microbes
Inorganic Contaminants							
Chromium, ppb	3.2	NA	100	100	2015	N	Erosion of natural deposits
Nitrate, ppm	2.6	NA	10	10	2017	N	Fertilizers; leaching from septic tanks, sewage; erosion of natural deposits
Radiological Contaminants							
Uranium, ug/L	1.1	NA	30	0	2013	N	Erosion of natural deposits
Disinfection Byproducts							
Haloacetic Acids, ppb	10	NA	60	NA	2015	N	Byproduct of drinking water disinfection
Total Trihalomethanes, ppb	22	NA	80	NA	2015	N	

Contaminants	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Sample Date	Violation Y/N	Major Sources in Drinking Water
Entry Point Disinfectant Residual – PA Ground Water Rule: This rule requires that no well station operate below specific minimum free chlorine levels for more than 4 hours.						
Chlorine, ppm	0.8	0.2*	0.2 – 3.4	2017	N	Water additive used to control microbes

*Disinfectant levels did not drop below minimum required level for more than 4 hours.

Lead and Copper	90th Percentile	Total Number of Samples	Samples Exceeding Action Level	Action Level	MCLG	Sample Date	Violation Y/N	Major Sources in Drinking Water
Copper, ppm	0.09	5	0	1.3	1.3	2016	N	Corrosion of household plumbing
Lead, ppb	ND	5	0	15	0	2016	N	

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Aqua is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your cold water tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

A boil water notice was sent to the Christian Springs Water System due to a loss of pressure caused by a water main break on January 11, 2017. A loss of positive water pressure is a signal of the existence of conditions that could allow contamination to enter the distribution system through back-flow by back pressure or back siphonage. As a result, there is an increased chance that *inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.* The boil water notice was lifted on January 13, 2017.

Water Sources: two wells.

Municipality Served: Moore Township, Northampton County.

Notes:

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.

Fluoride: Fluoride may help prevent tooth decay if administered properly to children, but can be harmful in excess. Customers in the Christian Springs system receive water from unfluoridated supplies.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. Some levels are based on a running annual average.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

ND: Not detected.

pCi/L, picocuries/Liter: A unit of concentration for radioactive contaminants.

ppb: A unit of concentration equal to one part per billion.

ppm: A unit of concentration equal to one part per million.

PWSID: Public water supply identification number.